DETERMINATION OF FLAKINESS INDEX AND ELONGATION INDEX OF COARSE AGGREGATE(IS 2386 (Part 1) 1963 (RA 2007)

Date: 18-07-2018

Lab ID	:	CP-RW-2018-07-16-04
Customer	:	Assistant Executive Engineer, Yelahanka Satellite town Sub division, BBMP, Bangalore.
Address	:	Yelahanka Satellite town Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains to the balance roads of Someshwaranagara in ward no:04
Agency	:	Sri. G. Venkategowda No:531/1, 14th A Cross, A Sector, Yelahanka New Town, Bangalore -64
Customer Reference	:	EE(YNK.D)E-PMT-13/W.O/000100/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	16-07-2018
Sample ID No	:	2018-07-16-04/01
Type of Mix	:	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of test	:	16-07-2018

Result:

Index	Percentage of Flakiness and Elongation Index	Secified limits as per MORTH specification table 400-12
Flakiness Index	9.5%	Combined Flakiness & Elongation Index for WMM is Maximum 35%
Elongation Index	10.7%	
Combined Flakiness and Elongation Index for WMM	20.2%	

Note:-
The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.

CIVIL Pro Sig ..... Date ..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

End of Report

PHYSICAL REQUIREMENTS FOR COARSE AGGREGATE FOR DENSE BITUMINOUS MACADAM

Date: 24-07-2018

Lab ID	:	**CP-RW-2018-07-21-03**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite town Sub division, BBMP, Bangalore.
Address	:	Yelahanka Satellite town Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains to the balance roads of Someshwaranagara in ward no:04
Agency	:	Sri. G. Venkategowda No:531/1, 14th A Cross, A Sector, Yelahanka New Town, Bangalore -64
Customer Reference	:	EE(YNK.D)E-PMT-13/W.O/000100/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	21-07-2018
Sample ID No	:	2018-07-21-03/01
Type of Mix	:	DBM (Dense Bituminous Macadam)
Date of test	:	21-07-2018

Table 500-6 : Physical Requirements fo Coarse Aggregate for Dense Bituminous Macadam

Property	Test	Result	Specification	Method of Test
Partical Shape	Flakiness Index	12.4	Combined Flakiness & Elongation Index for DBM is Maximum 35%	IS:2386 Part I
	Elongation Index	11.8		
Strength	Aggregate Impact Value	22.2	Maximum 30%	IS:2386 Part IV
Specific gravity	Specific gravity	2.65	Maximum 2.7	IS:2386 Part III
Water Absorption	Water Absorption	0.16	Maximum 2%	IS:2386 Part III

Note:-
The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quallity Manager

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

PHYSICAL REQUIREMENTS FOR COARSE AGGREGATE FOR BITUMINOUS CONCRETE

Date: 27-07-2018

Lab ID	:	**CP-RW-2018-07-24-04**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite town Sub division, BBMP,
Address	:	Yelahanka Satellite town Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains to the balance roads of Someshwaranagara in ward no:04
Agency	:	Sri. G. Venkategowda No:531/1, 14th A Cross, A Sector, Yelahanka New Town, Bangalore -64
Customer Reference	:	EE(YNK.D)E-PMT-13/W.O/000100/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	24-07-2018
Sample ID No	:	2018-07-24-04/01
Type of Mix	:	BC (Bituminous Concrete)
Date of test	:	24-07-2018

Table 500-16 : Physical Requirements fo Coarse Aggregate for Bituminous Concrete

Property	Test	Result	Specification	Method of Test
Partical Shape	Flakiness Index	9.8	Combined Flakiness & Elongation Index for BC is Maximum 35%	IS:2386 Part I
	Elongation Index	10.4		
Strength	Aggregate Impact Value	21.5	Maximum 24%	IS:2386 Part IV
Specific gravity	Specific gravity	2.57	Maximum 2.7	IS:2386 Part III
Water Absorption	Water Absorption	0.21	Maximum 2%	IS:2386 Part III

Note:-
The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.

CIVIL Pro BANGALORE Sig..... Date.....

R KARTHIK RECHAN
Authorized Signatory
Quallity Manager

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

CIVIL PRO
AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC- 5548

Format No: CP/TF/01

TEST REPORT ON BITUMEN

Date: 20-07-2018

Lab ID	:	**CP-RW-2018-07-18-03**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite town Sub division, BBMP, Bangalore.
Address	:	Yelahanka Satellite town Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains to the balance roads of Someshwaranagara in ward no:04
Agency	:	Sri. G. Venkategowda No:531/1, 14th A Cross, A Sector, Yelahanka New Town, Bangalore -64
Customer's Reference	:	EE(YNK.D)E-PMT-13/W.O/000100/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	18-07-2018
Sample ID No	:	2018-07-18-03/01
Sample Type	:	Bitumen
Reference to BIS codes	:	IS: 1201-1220(1978) (Reaffirmed-2004)
Date of test	:	18-07-2018

Test Results

Sl.no	Name of Test	Result	Requirements as per IS:73-2013
1	Penetration at 25°C , in 1/10th mm	67	60 to 70
2	Softening Point, °C	50.8	Min. 40°C
3	Ductility, cm	89	Min. 75cm
4	Flash point, °C	233	Min. 220°C
	Fire point, °C	256	

Note:-
The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.

CIVIL PRO Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

TEST RESULTS OF GRADATION FOR GSB
(IS 2386:(Part 1) 1963 (RA2011)

Date: 11-07-2018

Lab ID	:	**CP-RW-2018-07-09-03**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite town Sub division, BBMP, Bangalore.
Address	:	Yelahanka Satellite town Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains to the balance roads of Someshwaranagara in ward no:04
Agency	:	Sri. G. Venkategowda No:531/1, 14th A Cross, A Sector, Yelahanka New Town, Bangalore -64
Customer Reference	:	EE(YNK.D)E-PMT-13/W.O/000100/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	09-07-2018
Sample ID No	:	2018-07-09-03/01
Type of Mix	:	GSB (Granular Sub Base)
Date of test	:	09-07-2018
Oven Dry Weight	:	10000 Grams

IS Sieve Size(mm)	Weight Retained (gm)	Cumulative Weight Retained (gm)	% Cumulative Weight Retained	% Passing	Spec. Limit Vide Table 400.1 MORTH Specification
75	0	0	0	100	100
53	867	867	8.67	91.33	80-100
26.5	1692	2559	25.59	74.41	55-90
9.5	1305	3864	38.64	61.36	35-65
4.75	1467	5331	53.31	46.69	25-55
2.36	1698	7029	70.29	29.71	20-40
0.425	1732	8761	87.61	12.39	10-25
0.075	955	9716	97.16	2.84	0-5

TESTS ON FILLER SCREEN MATERIALS

Sl no	Particulars	Test results	Spec.Limit Vide Table
1	Liquid Limit, %	22.05%	Maximum 25
2	Plasticity index, %	Non plastic	Maximum 6

Note:-

The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.

CIVIL Pro BANGALORE Sig..... Date.....

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

CIVIL PRO
AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005
4, 7TH MAIN MALLESWARAM, BANGALORE -3

TEST RESULTS OF GRADATION FOR WMM

Date: 18-07-2018

Lab ID	:	CP-RW-2018-07-16-04
Customer	:	Assistant Executive Engineer, Yelahanka Satellite town Sub division, BBMP, Bangalore.
Address	:	Yelahanka Satellite town Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains to the balance roads of Someshwaranagara in ward no.04
Agency	:	Sri. G. Venkategowda No:531/1, 14th A Cross, A Sector, Yelahanka New Town, Bangalore -64
Customer Reference	:	EE(YNK.D)E-PMT-13/W.O/000100/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	16-07-2018
Sample ID No	:	2018-07-16-04/01
Type of Mix	:	WMM (Wet Mix Macadam)
Date of test	:	16-07-2018
Oven Dry Weight	:	11000 Grams

IS Sieve Size(mm)	Weight Retained (gm)	Cumulative Weight Retained (gm)	% Cumulative Weight Retained	% Passing	Spec.I.Vide Table 400.13 MORTH Specification
53	0	0	0.0	100.0	100
45	315	315	2.9	97.1	95-100
22.4	2259	2574	23.4	76.6	60-80
11.2	2179	4753	43.2	56.8	40-60
4.75	2251	7004	63.7	36.3	25-40
2.36	1621	8625	78.4	21.6	15-30
0.6	623	9248	84.1	15.9	8-22
0.075	1338	10586	96.2	3.8	0-5

Note:-

The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.

CIVIL Pro BANGALORE Sig..... Date.....

R.KARTHIK RECHAN
Authorized Signatory
Quality Manager

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

TEST RESULTS OF GRADATION FOR DBM
(IS 2386:(Part 1) 1963 (RA2011)

Date: 23-07-2018

Lab ID	:	CP-RW-2018-07-21-03
Customer	:	Assistant Executive Engineer, Yelahanka Satellite town Sub division, BBMP, Bangalore.
Address	:	Yelahanka Satellite town Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains to the balance roads of Someshwaranagara in ward no:04
Agency	:	Sri. G. Venkategowda No:531/1, 14th A Cross, A Sector, Yelahanka New Town, Bangalore -64
Customer Reference	:	EE(YNK.D)E-PMT-13/W.O/000100/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	21-07-2018
Sample ID No	:	2018-07-21-03/01
Type of Mix	:	DBM-Plant (Dense Bituminous Macadam)
Date of test	:	21-07-2018
Weight of Sample	:	5000 Grams

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10 (grading -2)
37.5	0	0	0	100	100
26.5	170	170	3.40	96.60	90-100
19	1015	1185	23.70	76.30	71-95
13.2	526	1711	34.22	65.78	56-80
4.75	1147	2858	57.16	42.84	38-54
2.36	718	3576	71.52	28.48	28-42
0.3	1072	4648	92.96	7.04	7-21
0.075	231	4879	97.58	2.42	2-8
PAN	69	4948	0.00	0	0

Note:-
The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL PRO BANGALORE Sig..... Date.....

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL|
GEO TECHNICAL| PROJECT MANAGEMENT| SURVEYING SERVICES |

TESTS RESULTS ON STABILITY OF MIX

Lab ID	:	**CP-RW-2018-07-21-03** **Date: 24-07-2018**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite town Sub division, BBMP, Bangalore.
Address	:	Yelahanka Satellite town Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains to the balance roads of Someshwaranagara in ward no:04
Agency	:	Sri. G. Venkategowda No:531/1, 14th A Cross, A Sector, Yelahanka New Town, Bangalore -64
Customer Reference	:	EE(YNK.D)E-PMT-13/W.O/000100/2017-18
Source of Sample	:	Hot Mix Plant, Bangalore
Sample Condition	:	Satisfactory
Date of Receipt	:	21-07-2018
Sample ID No	:	2018-07-21-03/01
Type of Mix	:	DBM (Dense Bituminous Mecadam)
Date of test	:	21-07-2018

The results of the tests conducted on the Dense Bituminous Macadam mix sample are as follow

Sl.No	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.30	11.43	9KN(Min)
2	Marshal flow at 60°C, mm	3.66	3.74	2-4
3	Percent air Voids	4.52	4.58	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.62	14.67	13-15
5	Percent Voids filled with Bitumen(VFB %)	70.13	70.28	65-75
6	Density, g/cc	2.43	2.41	–

Note:-
The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro BANGALORE Sig..... Date.....

Page 1/1
End of Report

TEST REPORT OF AGGEGRATE STRIPPING VALUE OF ROAD AGGRGATE (IS:6241)

Date: 24-07-2018

Lab ID	:	CP-RW-2018-07-21-03
Customer	:	Assistant Executive Engineer, Yelahanka Satellite town Sub division, BBMP, Bangalore.
Address	:	Yelahanka Satellite town Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains to the balance roads of Someshwaranagara in ward no:04
Agency	:	Sri. G. Venkategowda No:531/1, 14th A Cross, A Sector, Yelahanka New Town, Bangalore -64
Customer Reference	:	EE(YNK.D)E-PMT-13/W.O/000100/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	21-07-2018
Sample ID No	:	2018-07-21-03/01
Type of Mix	:	DBM(Dense Bitumnous Macadam)
Date of test	:	21-07-2018

Type of Binder	:	60/70
% of Binder Used	:	5.0%
Weight of Aggregate	:	200.0 gm
Weight of Binder	:	10.0 gm
Temperature of water bath	:	40°C

No of test	Retained Stripping Percentage	Stripping Percentage	Average Retained Stripping Percentage	Secified limits as per MORTH specification table 500-8
1	98.0	2.0	98.2	Minimum Retained Coating 95%
2	98.5	1.5		
3	98.0	2.0		

Note:-
The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.

CIVIL PRO Sig..... Date..... BANGALORE

B KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

TEST RESULTS OF BITUMEN BINDER CONTENT AND GRADATION FOR DBM
(IS 2386:(Part 1) 1963 (RA2011)

Date: 30-07-2018

Lab ID	:	CP-RW-2018-07-28-01
Customer	:	Assistant Executive Engineer, Yelahanka Satellite town Sub division, BBMP, Bangalore.
Address	:	Yelahanka Satellite town Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains to the balance roads of Someshwaranagara in ward no:04
Agency	:	Sri. G. Venkategowda No:531/1, 14th A Cross, A Sector, Yelahanka New Town, Bangalore -64
Customer Reference	:	EE(YNK.D)E-PMT-13/W.O/000100/2017-18
Source of Sample	:	Sample supplied by Agency
Date of Receipt	:	28-07-2018
Sample ID No	:	2018-07-28-01/01
Type of Mix	:	DBM (Dense Bituminous Macadam)
Date of test	:	28-07-2018

SLno	Description	Index	Trail 1	Trail 2
1	Weight of the Sample	A	500	498
2	Weight of the sample After extraction	B	477	474
3	Bitumen percentage	$\frac{A-B}{A} \times 100$	4.6	4.8
4	Average percentage	%	4.7	

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig..... Date..... BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

Lab ID : CP-RW-2018-07-28-01
Sample ID No : 2018-07-28-01/01
Date: 30-07-2018

AFTER EXTRACTION(Trail-1)

Weight of Sample(gm) : 477

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10(grading -2)
37.5	0	0	0.0	100.0	100
26.5	0	0	0.0	100.0	90-100
19	54	54	11.3	88.7	71-95
13.2	49	103	21.6	78.4	56-80
4.75	165	268	56.2	43.8	38-54
2.36	70	338	70.9	29.1	28-42
0.3	78	416	87.2	12.8	7-21
0.075	25	441	92.5	7.5	2-8

AFTER EXTRACTION(Trail-2)

Weight of Sample(gm) : 474

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10(grading -2)
37.5	0	0	0.0	100.0	100
26.5	0	0	0.0	100.0	90-100
19	56	56	11.8	88.2	71-95
13.2	53	109	23.0	77.0	56-80
4.75	169	278	58.6	41.4	38-54
2.36	61	339	71.5	28.5	28-42
0.3	73	412	86.9	13.1	7-21
0.075	32	444	93.7	6.3	2-8

Note:-
The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro BANGALORE Sig..... Date.....

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

TEST RESULTS OF GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2007)

Date: 25-07-2018

Lab ID	:	CP-RW-2018-07-24-04
Customer	:	Assistant Executive Engineer, Yelahanka Satellite town Sub division, BBMP, Bangalore.
Address	:	Yelahanka Satellite town Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains to the balance roads of Someshwaranagara in ward no:04
Agency	:	Sri. G. Venkategowda No:531/1, 14th A Cross, A Sector, Yelahanka New Town, Bangalore -64
Customer Reference	:	EE(YNK D)E-PMT-13/W.O/000100/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	24-07-2018
Sample ID No	:	2018-07-24-04/01
Type of Mix	:	BC-Plant (Bituminous Concrete)
Date of test	:	24-07-2018
Oven Dry Weight	:	5000 Grams

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-17(grading-2)
19	0	0	0.0	100.0	100
13.2	72	72	1.4	98.6	90-100
9.5	801	873	17.5	82.5	70-88
4.75	1005	1878	37.6	62.4	53-71
2.36	389	2267	45.3	54.7	42-58
1.18	422	2689	53.8	46.2	34-48
0.6	573	3262	65.2	34.8	26-38
0.3	551	3813	76.3	23.7	18-28
0.15	455	4268	85.4	14.6	12-20
0.075	324	4592	91.8	8.2	4-10
PAN	408	5000	100	0.0	0

Note:-
The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.

CIVIL Pro ★ Sig Date ★ BANGALORE

R.KARTHIK RECHAN
Authorized Signatory
Quality Manager

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

TEST REPORT OF AGGEGRATE STRIPPING VALUE OF ROAD AGGRGATE (IS:6241)

Lab ID	:	**CP-RW-2018-07-24-04** **Date: 27-07-2018**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite town Sub division, BBMP, Bangalore.
Address	:	Yelahanka Satellite town Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains to the balance roads of Someshwaranagara in ward no:04
Agency	:	Sri. G. Venkategowda No:531/1, 14th A Cross, A Sector, Yelahanka New Town, Bangalore -64
Customer Reference	:	EE(YNK.D)E-PMT-13/W.O/000100/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	24-07-2018
Sample ID No	:	2018-07-24-04/01
Type of Mix	:	BC(Bitumenous Concrete)
Date of test	:	24-07-2018

Type of Binder	:	60/70
% of Binder Used	:	5.0%
Weight of Aggregate	:	200.0 gm
Weight of Binder	:	10.0 gm
Temperature of water bath	:	40°C

No of test	Retained Stripping Percentage	Stripping Percentage	Average Retained Stripping Percentage	Secified limits as per MORTH specification table 500-8
1	98.5	1.5	98.3	Minimum Retained Coating 95%
2	98.5	1.5		
3	98.0	2.0		

Note:-
The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL PRO Sig Date BANGALORE

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

TESTS RESULTS ON STABILITY OF MIX

Lab ID	:	**CP-RW-2018-07-24-04**	**Date: 27-07-2018**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite town Sub division, BBMP, Bangalore.	
Address	:	Yelahanka Satellite town Sub division, BBMP, Bangalore.	
Project Name	:	Improvements to roads and drains to the balance roads of Someshwaranagara in ward no:04	
Agency	:	Sri. G. Venkategowda No:531/1, 14th A Cross, A Sector, Yelahanka New Town, Bangalore -64	
Customer Reference	:	EE(YNK.D)E-PMT-13/W.O/000100/2017-18	
Source of Sample	:	Hot Mix Plant, Bangalore	
Sample Condition	:	Satisfactory	
Date of Receipt	:	24-07-2018	
Sample ID No	:	2018-07-24-04/01	
Type of Mix	:	BC (Bituminous Concrete)	
Date of test	:	24-07-2018	

The results of the tests conducted on the Bituminous Concrete mix sample are as follow

SLNo	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.19	11.33	10KN(min)
2	Marshal flow at 60°C, mm	3.52	3.61	2-4
3	Percent air Voids	4.82	4.73	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.28	14.16	13-15
5	Percent Voids filled with Bitumen(VFB %)	71.87	70.63	65-75
6	Density, g/cc	2.25	2.26	–

Note:-
The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro BANGALORE Sig Date

Page 1/1
End of Report

TEST RESULTS OF BITUMEN BINDAR CONTENT AND GRADATION FOR BC
IS 2386 (Part I) 1963 (RA 2011)

Lab ID : CP-RW-2018-07-30-01 **Date: 31-07-2018**

Customer : Assistant Executive Engineer, Yelahanka Satellite town Sub division, BBMP, Bangalore.

Address : Yelahanka Satellite town Sub division, BBMP, Bangalore.

Project Name : Improvements to roads and drains to the balance roads of Someshwaranagara in ward no:04

Agency : Sri. G. Venkategowda No:531/1, 14th A Cross, A Sector, Yelahanka New Town, Bangalore -64

Customer Reference : EE(YNK.D)E-PMT-13/W.O/000100/2017-18

Source of Sample : Sample supplied by Agency

Date of Receipt : 30-07-2018

Sample ID No : 2018-07-30-01/01

Type of Mix : BC (Bituminous Concrete)

Date of test : 30-07-2018

SLno	Description	Index	Trail I	Trail 2
1	Weight of the Sample	A	503	503
2	Weight of the sample After extraction	B	471	472
3	Bitumen percentage	$\frac{A-B}{A} \times 100$	6.36	6.16
4	Average percentage	%	6.3	

FOR CIVIL Pro.

CIVIL PRO Sig ..... Date ..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL|
GEO TECHNICAL| PROJECT MANAGEMENT| SURVEYING SERVICES |

Lab ID : CP-RW-2018-07-30-01 **Date: 31-07-2018**

Sample ID : 2018-07-30-01/01

AFTER EXTRACTION - Trail-1

Total Weight of the Sample(gm) : 471

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	5	5	1.1	98.9	90-100
9.5	67	72	15.3	84.7	70-88
4.75	135	207	43.9	56.1	53-71
2.36	50	257	54.6	45.4	42-58
1.18	35	292	62.0	38.0	34-48
0.6	28	320	67.9	32.1	26-38
0.3	55	375	79.6	20.4	18-28
0.15	31	406	86.2	13.8	12-20
0.075	42	448	95.1	4.9	4-10

AFTER EXTRACTION - Trail-2

Total Weight of the Sample(gm) : 472

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	7	7	1.5	98.5	90-100
9.5	62	69	14.6	85.4	70-88
4.75	131	200	42.4	57.6	53-71
2.36	67	267	56.6	43.4	42-58
1.18	36	303	64.2	35.8	34-48
0.6	30	333	70.6	29.4	26-38
0.3	41	374	79.2	20.8	18-28
0.15	28	402	85.2	14.8	12-20
0.075	44	446	94.5	5.5	4-10

Note:-

The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL PRO BANGALORE Sig..... Date.....